NOTE: This disposition is nonprecedential.

# United States Court of Appeals for the Federal Circuit

BUSHNELL HAWTHORNE, LLC,

Plaintiff-Appellant

v.

CISCO SYSTEMS, INC.,

Defendant-Appellee

2019-2191

Appeal from the United States District Court for the Eastern District of Virginia in No. 1:18-cv-00760-TSE-MSN, Judge T. S. Ellis, III.

Decided: May 14, 2020

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Before O'MALLEY, BRYSON, and CHEN, *Circuit Judges*. O'MALLEY, *Circuit Judge*.

Bushnell Hawthorne, LLC ("Bushnell") appeals a decision of the United States District Court for the Eastern District of Virginia holding all asserted claims of U.S. Patent No. 7,933,951 ("951 patent") invalid as indefinite pursuant to 35 U.S.C. § 112(b). Bushnell Hawthorne, LLC v. Cisco Sys., Inc., No. 1:18-CV-760, 2019 WL 2745735 (E.D. Va. July 1, 2019). For the reasons discussed below, we affirm.

### I. BACKGROUND

# A. The '951 Patent

The '951 patent, titled "Systems and Methods for Discerning and Controlling Communication Traffic," relates "to identifying various types of communication traffic and controlling movement of that traffic within a communications network." '951 patent, col. 1, ll. 1–3, 18–20. The invention "permit[s] redirection of only certain types of communication traffic of interest[,] for example HTTP traffic, while permitting other types of communication, for example SMTP traffic, to pass without redirection." *Id.* at Abstract. This invention is useful for redirecting internet traffic to generate advertising revenue. *Id.* 

Claim 1, the only independent claim in the '951 patent, is representative of the claims at issue on appeal:

- 1. A computer system for redirecting Internet communications, said system comprising:
  - a first processor that receives information from a computer at a point of origin;
  - a second processor that analyzes the information for one or more pre-defined bit strings or character sets;

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a third processor that receives return information from a computer that communicates with other computers on the Internet;

a fourth processor that analyzes the return information for said one or more pre-defined bit strings or character sets;

# a fifth processor that

- a) supplies one or more IP Addresses for the information requested if one or more of the predefined bit strings or character sets are not encountered,
- b) supplies one or more second IP Addresses for the information requested if one or more different bit strings or character sets are encountered,
- c) supplies one or more third IP Addresses if one or more of the pre-defined bit strings or character sets are encountered and a higher level protocol can be inferred, and/or
- d) allows the traffic to flow thru unmodified; and

a sixth processor that analyzes a request submitted to *said different IP Address* for one or more alternative bit strings or character sets,

wherein the alternative bit strings or character sets are indicative of a particular higher level Internet communication protocol, and

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wherein the system further comprises maintaining a list of bit strings or character sets for which a different IP Address should not be supplied, wherein the list is updated one or more times after creation of the list, and wherein the list is updated based on monitoring of requests for: originating IP Address, requested hostname, size of a DNS query, frequency of a single hostname or domain name, port number, date, and/or time

'951 patent, col. 21, ll. 9–45 (emphases added). Dependent claims 8, 13, and 15 contain additional limitations relevant to this appeal. Claim 8 requires "a seventh processor that receives a request to connect to a computer at *said IP Address.*" *Id.* at col. 22, ll. 7–8 (emphasis added). Claim 13 provides "a tenth processor at *the different IP Address.*" *Id.* at col. 22, l. 24 (emphasis added). And claim 15 adds "items for the list are generated by the sixth processor that analyzes a request submitted to *said different IP Address.*" *Id.* at col. 22, ll. 28–30 (emphasis added).

With respect to the claim term "said different IP Address," the specification provides:

[T]he present invention provides a computer system for redirecting Internet communications, where the system comprises . . . a processor that analyzes a request submitted to *the different IP Address* for one or more alternative bit strings or character sets, wherein the alternative bit strings or character sets are indicative of a particular higher level Internet communication protocol.

*Id.* at col 13, ll. 3–25 (emphasis added). It also states:

[T]he system may comprise maintaining a list of bit strings or character sets for which a *different IP Address* should not be supplied, for example wherein items for the list are generated by the processor that analyzes a request submitted to said different IP Address. The list can be maintained by a processor that transparently passes DNS responses if one or more conditions or pre-defined bit strings or character sets are not encountered, and that supplies a different IP Address if one or more of the conditions or pre-defined bit strings or character sets are encountered. . . . In embodiments, a list is maintained on a computer that analyzes one or more requests submitted to the different IP Address and a list is maintained on a computer that analyzes the request(s) submitted to the different IP Address, where the two lists are compared to identify entries in common or not in common.

*Id.* at col. 13, l. 47–col. 14, l. 1 (emphases added). Finally, the specification explains that:

[I]n embodiments, the system can comprise means for . . . returning to the submitter of the request an *IP Address that is different from that requested*. In embodiments, the system further comprises means for receiving a request for *the different IP Address*; means for analyzing the request for *the different IP Address* for pre-defined bit strings or character sets indicative of a particular Internet protocol . . . .

Id. at col. 17, ll. 42–57 (emphases added).

# B. District Court Proceedings

Bushnell filed suit against Cisco Systems, Inc. ("Cisco") in June 2018, alleging infringement of nineteen claims of the '951 patent. The case proceeded to claim construction. In its claim construction briefing, Cisco argued that all claims of the '951 patent were invalid as indefinite. Specifically, Cisco argued that "said different IP Address," and related terms, are indefinite. Cisco further alleged that the claims are indefinite because they mix statutory classes of

claims. Bushnell argued that all of the disputed terms carry their plain meaning. It contended that the plain meaning of the "different IP Address" terms is "an IP address supplied by the fifth processor that is different from the IP address for the information requested by the user or computer at the point of origin." *Bushnell Hawthorne*, *LLC*, 2019 WL 2745735, at \*2.

Following a *Markman* hearing, the district court ruled in favor of Cisco, finding independent claim 1 indefinite on three separate grounds: (1) "said different IP Address" lacks antecedent basis and does not have a reasonably certain meaning to a person of ordinary skill in the art ("POSA"); (2) "a different IP Address" does not have a reasonably certain meaning to a POSA; and (3) the final limitation, providing that "the system further comprises maintaining a list," improperly mixes classes of statutory subject matter such that it is not clear if the claim is infringed by building or using the system. *Id.* at \*2–9.

First, the district court explained that the antecedent basis for "said different IP Address" is unclear—possibly referring to any of three types of IP addresses that claim 1's fifth processor might supply: "one or more IP Addresses," "one or more second IP Addresses," or "one or more third IP Addresses." Id. at \*3. Because the IP addresses mentioned in the fifth processor limitation are the first instances of the term "IP Addresses" in the claim, the district court presumed one of those was likely "said different IP Address." Id. The fact that the fifth processor limitation claims three separate classes of IP addresses, however, led the district court to conclude that it was not possible to discern which of the three addresses was referenced by the disputed limitation. *Id.* The district court further explained that the confusion caused by the claim language is enhanced by the singular/plural mismatch between the fifth processor limitation's potential to produce multiple IP addresses and the claimed singular "said different IP Address." Id. at \*4.

Beyond the claim language, the district court found that the specification provides no clarification on the meaning of the term because most of the specification suffers from the same lack of antecedent basis problem. *Id.* And, although the specification describes a "means for returning to the submitter of the request an IP Address that is different from that requested," the remainder of the specification is ambiguous and makes what appear to be inconsistent uses of the term. Id. (quoting '951 patent, col. 17, ll. 51-53). In some instances, the district court noted, the specification refers to a requested IP address as "the different IP Address." Id. (citing, inter alia, '951 patent, col. 13, l. 22). Based on this intrinsic record, the district court found that a POSA would be unable to discern, with reasonable certainty, whether a particular IP address was "said different IP Address" within the meaning of the claim. *Id.* at \*5. It therefore held the claim indefinite. *Id*.

Second, the district court found the claim term "a different IP Address" indefinite. It explained,

[l]ike the term "said different IP address," the claim term "a different IP address" appears to allude to another IP address from which "a different IP address" is different. But the claim language and specification neither explain how or from what other IP address "a different IP address" differs nor otherwise clarify what constitutes "a different IP address."

*Id.* at \*6.

Third, the district court held claim 1 indefinite for improperly combining the structural elements of a "computer system" with a method element, "maintaining a list." *Id.* at \*7–9. The district court further held dependent claims 8, 13, and 15 indefinite based on the lack of clarity as to the meaning of the "IP Address" terms. *Id.* at \*2–5, 6–7.

Having found all asserted claims indefinite, the district court entered judgment for Cisco. J.A. 21. Bushnell appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295.

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"[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898, 901 (2014). We review a district court's determination that a claim is indefinite de novo and subsidiary factual findings, if any, for clear error. Sonix Tech. Co. v. Publ'ns Int'l, Ltd., 844 F.3d 1370, 1376 (Fed. Cir. 2017).

Bushnell argues that the district court erred in holding that "said different IP address," and related terms, are indefinite. Appellant's Br. 12–18. It contends that "said different IP Address" clearly refers to an IP address to which the user has been redirected. *Id.* at 12. Its argument is unavailing.

Claim 1 of the '951 patent is, on its face, entirely unclear as to the meaning of "said different IP Address." As an initial matter, "said different IP Address" appears in the claim without antecedent basis. Prior to that point, the claim recites certain IP addresses, but never a "different" one. See '951 patent, claim 1. The lack of antecedent basis signals a potential indefiniteness problem but does not end the inquiry. See Energizer Holdings, Inc. v. Int'l Trade Comm'n, 435 F.3d 1366, 1370 (Fed. Cir. 2006) ("Whether [a] claim, despite lack of explicit antecedent basis . . . nonetheless has a reasonably ascertainable meaning must be decided in context.").

Moving to the broader context of the claim, however, only compounds the problem. Claim 1 describes three classes of IP addresses prior to the "said different IP Address" limitation: "one or more IP Addresses," "one or more second

IP Addresses," or "one or more third IP Addresses." '951 patent, claim 1. Each of those terms is presumed to have a separate meaning and, therefore, presumed to refer to different classes of IP addresses. See Bd. of Regents v. BENQ Am. Corp., 533 F.3d 1362, 1371 (Fed. Cir. 2008). With three different IP addresses to choose from, a POSA faced with the "said different IP Address" limitation is left to wonder which of the different IP addresses is "said" different one.

Further, the mismatch between the various plural IP addresses provided earlier in the claim and the singular "said different IP Address" suggests a term that is entirely untethered from the words around it. It is true that, as a general rule, a singular noun encompasses the plural for claim construction purposes. 01 Communique Lab., Inc. v. LogMeIn, Inc., 687 F.3d 1292, 1297 (Fed. Cir. 2012). This claim construction principle, however, does not render the mismatch irrelevant. Where, as here, a singular/plural mismatch further confuses an already confused claim, it is proper to consider the mismatch in discerning whether a POSA could understand the claim with reasonable certainty.

The specification does not clarify the meaning of "said different IP Address." Much of the specification uses "the different IP Address" or "said different IP Address" in the same way as the claim—without explanation or antecedent basis. At one point, the specification appears to indicate, contrary to Bushnell's contention, that the "different" IP address the patent refers to is the one which was requested. See '951 patent, col. 13, ll. 21–22 ("a processor that analyzes a request submitted to the different IP Address"). At another, the specification provides comparing one list of requests submitted to "the different IP Address" to another list of requests submitted to "the different IP Address"—reasonably indicating that those two uses of "different IP Address" are not, even in the same sentence, referring to identical data sets. Id. at col. 13, l. 63–col.14,

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l. 1. Given this backdrop, the single sentence in the specification that potentially supports Bushnell's interpretation is insufficient to save the claim. *See id.* at col. 17, ll. 51–53 ("means for returning to the submitter of the request an IP Address that is different from that requested").

The meaning of "said different IP Address" is entirely unclear on the record before us. A POSA, faced with the claims and the specification, could not, with reasonable certainty, discern the meaning of the claim term. See Nautilus, Inc., 572 U.S. at 901. We thus hold claim 1, and all claims depending therefrom, indefinite.

#### Ш

Because we affirm the district court as to the "said different IP Address" limitation and hold all asserted claims indefinite, we do not address the remaining issues raised on appeal. For the reasons discussed above, we *affirm* the district court's decision.

### **AFFIRMED**

Noither party argues that the

<sup>&</sup>lt;sup>1</sup> Neither party argues that the prosecution history sheds light on the meaning of "said different IP Address." Accordingly, we do not consider it here.